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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,082	03/06/2002	Michael E. Cotto	006-241-300	8490

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DALY, CROWLEY & MOFFORD, LLP
SUITE 101
275 TURNPIKE STREET
CANTON, MA 02021-2310

EXAMINER

ADDIE, RAYMOND W

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,082

Applicant(s)

COTTO, MICHAEL E.

Examiner

Raymond W. Addie

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 14 and 16-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 14 and 16-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/6/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 25, 33 are objected to because of the following informalities:

Claim 25 recites "flexibly rigid polymer", should be --stiff but flexible polymer--, in order to be consistent with the specification.

Claim 33, ln. 3, the phrase "flexing at flexing at"; appears to be a double recitation of the phrase --flexing at--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 14, 16-20, 22, 24, 25, 28-31, 33, 34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Russo # 5,417,044.

Russo discloses a rake device (1) comprising:

A handle (3) having a 1st and 2nd end.

A holder (35), having an arcuate curve complementing a surface of the elongate rake head (5), secured to the 2nd end of the handle.

An elongated, cylindrical rake head (5) secured in a fixed position in relation to the handle by the holder; and is connected to the holder via at least one connector (103, 105, 107, 109, 113). See col. 4, Ins. 1-10.

A plurality of cylindrical tines (6) extending from the rake head (5) via a plurality of holes (unnumbered); see Fig. 1.

Wherein an angle between the plurality of tines and the handle ranges between 30-60°.

Although Russo does not disclose a specific angle between the tine ends and the rake handle; Russo does disclose the ends of the tines (6) can be round tipped, pointed topped, flat tipped, or provided with a flattened surface. Hence, it would have been obvious if not inherent that one of ordinary skill in the art, that Russo contemplated flattened surfaces of all angular relationships with the handle, since no limit is disclosed. See Russo Col. 2, In. 50-Col. 4, In. 29.

With respect to Claims 24, 27, 33, 34 Russo discloses in a preferred embodiment, that 20 tines could be uniformly spaced along a 15-16" rake head, thus providing a ½"-¾" uniform spacing between tines. Although Russo does not disclose the extent of flexing of the cantilevered ends of the tines, Russo does disclose the use of either metal or plastic tines. Hence, it would have been obvious, if not inherent that plastic and some types of metal tines would be able to flex in the range of ½"-1", without breaking.

3. Claim 21, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo as applied to Claims 19, 28 above and further in view of Fuller # 1,577,065. Russo discloses essentially all that is claimed as put forth with respect to claim 19 above, but does not disclose providing a plurality of fasteners for securing the tines to the rake head. However, Fuller '065 discloses a lawn tool having a plurality of tines (13) removably secured to a cylindrical rake head (10/11) by a plurality of removable fasteners (12). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the rake of Russo with a plurality of removable fasteners, as taught by Fuller '065, in order to replace broken or worn tines. See Fuller, Figs 1, 5.

4. Claims 23, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo '044, as applied to Claims 22, 13 above and further in view of Judy # 4,270,614. Russo discloses essentially all that is claimed, as put forth with respect to Claim 22, as put forth above, but does not disclose the diameter of the tines. However, Judy teaches it is common to provide stone rakes with tines (46) having a diameter between 3/16"-1/2" in diameter in order to remove small stones, sticks that would otherwise interfere with a finished landscape for planting lawn seed or the like. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to provide the rake device of Russo, with 1/4"-1/2" diameter tines, as taught by Judy, in order to provide a resilient but stiff raking tine.

5. Claims 26, 36, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo '044 in view of Guidarelli # 5,142,855.

Russo '044 discloses essentially all that is claimed, to include the use of metal or plastic tines. What Russo does not disclose is the specific use of Nylon. However, Guidarelli teaches it is desirable to make rake tines (26) from metal or Nylon. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to make the rake device of Russo from Nylon or metal, as taught by Guidarelli, since Guidarelli, teaches two materials are equivalent. See col. 1, lns. 61-67.

In regards to Claim 37 Russo discloses a rake (1) having cylindrical tines (6) of either metal or plastic, extending from a rake head (5) and forming an angle of 30-60° with a handle (3) and having, at a free end of each tine, a rounded end, pointed end or a flattened or other truncated end surface that forms an angle with a handle (3).

Although Russo does not disclose flexibility of the tines nor the angle formed between the truncated end surfaces and the handle, Russo does disclose the use of resilient spring steel or resilient plastic. Further it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that Russo contemplated an infinite range of angular relationships, since an open range of flattened surfaces are disclosed. Further, Guidarelli discloses a push/pull rake, preferably having nylon tines (16).

Said method comprising the steps of:

Pushing particulate matter with a rake.

Pulling particulate matter with the rake.

Although neither Russo nor Guidarelli specifically disclose flexing the tines from about ½-1", both Russo and Guidarelli do specifically recite the use of spring steel or plastic tines. Hence, it is obvious that the tines have a certain degree of flexibility that would permit the tines to flex from about ½-1" during the raking action.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use the rake of Russo, in a push/pull method, as taught by Guidarelli, in order to separate large particles, i.e. leaves from small particles, i.e. other debris. See Guidarelli Col. 1, ln. 50-col. 2, ln. 65.

Response to Arguments

6. Applicant's arguments, see paper # 11, filed 10/6/2003, with respect to the rejection(s) of claim(s) 13, 14, 16-37 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Russo '044.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Majkrzak # 6,199,358 B1 discloses a nylon tine. Jung # 6,158,202 discloses a lawn machine having flexible tines.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Addie whose telephone number is (703) 305-0135. The examiner can normally be reached on Monday-Friday from 7:00 am to 2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703) 308-3870. The fax phone number for this Group is (703) 872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.



Thomas B. Will
Supervisory Patent Examiner
Group 3600

RWA
11/25/2003